



Approved for use through 07/31/2006. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449/PIC

(Use as many sheets as necessary)

Sheet 1

of 2

**Complete if Known**

Application Number	10/803,295
Filing Date	03/18/2004
First Named Inventor	SUNDARAM, Mani et al.
Art Unit	2878
Examiner Name	
Attorney Docket Number	20030127-US

## U. S. PATENT DOCUMENTS

## FOREIGN PATENT DOCUMENTS

**Examiner  
Signature**

/Sara Crane/

Date Considered

01/10/2007

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/803,295
Filing Date	03/18/2004
First Named Inventor	SUNDARAM, Mani et al.
Art Unit	2878
Examiner Name	
Attorney Docket Number	20030127-US

Sheet 2 of 2

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		GUNAPALA, SARATH et al., "MQW Based Blocked Intersubband Detector for Low Background Operation", NASA Tech Briefs, July 2001, pp 1-2, NPO-21073, NASA's Jet Propulsion Laboratory, Pasadena, CA.	
		BANDARA, SUMITH et al., "Quantum Well Infrared Photodetectors for Low Background Applications", www.eps.org, March 2001, p.1, Jet Propulsion Laboratory.	
		GUNAPALA, S. et al., "Quantum Well Infrared Photodetector (QWIP) Focal Plane Arrays", Semiconductors and Semimetals, 1999, pp 1-83, vol. 62.	
		GUNAPALA, S. et al., "640X486 Long-wavelength Two-color GaAs/AlGaAs Quantum Well Infrared Photodetector (QWIP) Focal Plane Array Camera", pp 1-24.	
		GUNAPALA, S. et al., "640X512 Pixel Four-Band, Broad-Band, and Narrow-Band Quantum Well Infrared Photodetector Focal Plane Arrays", pp 1-12.	

These references were considered, but complete dates, including day, month, and year are not provided.

Examiner Signature	<i>John W. Crane</i>	Date Considered	1/10/07
--------------------	----------------------	-----------------	---------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.